UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,474	01/05/2006	Erik Rytter Ottosen	3893-0220PUS2	1370
	7590 08/07/200 ART KOLASCH & BI	EXAMINER		
PO BOX 747	CH MA 22040 0747	KOSACK, JOSEPH R		
FALLS CHURCH, VA 22040-0747			ART UNIT	PAPER NUMBER
			1626	
			NOTIFICATION DATE	DELIVERY MODE
			08/07/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

	Application No.	Applicant(s)			
	10/563,474	OTTOSEN ET AL.			
Office Action Summary	Examiner	Art Unit			
	Joseph R. Kosack	1626			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) ☐ Responsive to communication(s) filed on 28 M 2a) ☐ This action is FINAL . 2b) ☐ This 3) ☐ Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro				
Disposition of Claims					
4) ☐ Claim(s) 49,50,56,58,63-71,77-81,83,88,89,91 4a) Of the above claim(s) 83,88,89 and 92 is/ar 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 49,50,56,58,63-71,77-81 and 91 is/are 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	e withdrawn from consideration.	lication.			
Application Papers					
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction of the oath or declaration is objected to by the Examine 11).	epted or b) objected to by the Edrawing(s) be held in abeyance. See on is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 01/05/2006.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate			

DETAILED ACTION

Claims 49, 50, 56, 58, 63-71, 77-81, 83, 88, 89, 91, and 92 are pending in the instant application.

Amendments

The amendment filed on May 28, 2008 has been acknowledged and has been entered into the application file.

Election/Restrictions

Applicant's election with traverse of the amended compound claims 49, 50, 56, 58, 63-71, 77-81 and 91 in the reply filed on May 28, 2008 is acknowledged. The traversal is on the ground(s) that the amended claims have unity of invention. This is not found persuasive because an art rejection can still be made on the compound claims, which means that the claims do not contain a special technical feature.

The requirement is still deemed proper and is therefore made FINAL.

Claims 83, 88, 89, and 92 are withdrawn from further consideration by the Examiner under 37 CFR 1.142(b) as being drawn to a non-elected invention.

Priority

The claim to priority as a 371 filing of PCT/DK04/00490 filed on July 9, 2004, which claims priority to 60/489,488 filed on July 24, 2003 is acknowledged in the instant application.

Information Disclosure Statement

The Information Disclosure Statement filed on January 5, 2006 has been considered by the Examiner.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 49, 63-65, 67, 69-71, 77, 78, 81, and 91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ottosen et al. (WO 2001/05744) in view of Patani et al. (*Chem Rev, 1996,* 3147-3176).

Application/Control Number: 10/563,474 Page 4

Art Unit: 1626

<u>Determination of the scope and content of the prior art (MPEP §2141.01)</u>

Ottosen et al. teaches a compound of the formula

which corresponds to Formula I where R1

is methyl, R2 is chlro, there are two R3s and they are nitro and bromo, R4 is hydrogen, R5 is hydrogen, R6 is Y2-R9, Y2 is O, R9 is methyl substituted by 1 R7, and R7 is methyl. See Example 9, page 23.

Ascertainment of the difference between the prior art and the claims (MPEP §2141.02)

Ottosen et al. does not teach where R4 is fluorine.

Finding of prima facie obviousness--rational and motivation (MPEP §2142-2413)

Patani et al. teach the bioisosteric replacement of fluorine for hydrogen. See section II. A. 1. "Fluorine vs Hydrogen Replacements" on pages 3149-3150.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to synthesize the compound of Villhauer and bioisosterically replace a hydrogen at the 2-position of the phenyl ring with fluorine accordine to Patani et al. with a reasonable expectation of success. The motivation to make the claimed invention from the teachings of the prior art is provided by Patani et al. Patani et al. teach that bioisosterism represents one approach used by the medicinal chemist for the rational modification of lead compounds into safer and more clinically effective agents. See page 3147, column 1.

Double Patenting

Page 5

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 49, 50, 56, 58, 63-71, 77-81 and 91 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,541,670. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are drawn to the same art specific subject matter.

'670 teaches a genus of compounds of the formula

which overlaps with the instant claims where R4 is

Application/Control Number: 10/563,474 Page 6

Art Unit: 1626

hydrogen, 1 or more R3 groups are fluorine with one at the 2-position, R5 can be amide, and all other substituents are as defined.

Conclusion

Claims 49, 50, 56, 58, 63-71, 77-81 and 91 are rejected.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph R. Kosack whose telephone number is (571)272-5575. The examiner can normally be reached on M-Th 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph McKane can be reached on (571)-272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Golam M. M. Shameem, Ph.D./ Primary Examiner, Art Unit 1626 Application/Control Number: 10/563,474

Page 7

Art Unit: 1626

/Joseph R Kosack/ Examiner, Art Unit 1626